

U.S. Patent Application Serial No. 09/941,666
Amendment dated **September 8, 2003**
Reply to OA of **June 18, 2003**

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (canceled):

Claim 2. (previously presented): An ink jet recording sheet according to Claim 20, wherein a silanol-modified polyvinyl alcohol is contained as the binder.

bl Claim 3. (previously presented): An ink jet recording sheet according to Claim 20, wherein the water-soluble cationic organic material is a dicyandiamide condensate.

Claim 4. (previously presented): An ink jet recording sheet according to Claim 20, wherein the ink receiving layer contains a hydrate aluminum oxide.

Claim 5. (previously presented): An ink jet recording sheet according to Claim 20, wherein the ink receiving layer contains a water-soluble aluminum salt.


Claim 6.(original): An ink jet recording sheet comprising an ink receiving layer provided on a substrate, said ink receiving layer being formed by preparing a layer containing a porous filler and a binder by coating and drying on the substrate and thereafter allowing the layer to be impregnated

U.S. Patent Application Serial No. 09/941,666
Amendment dated **September 8, 2003**
Reply to OA of **June 18, 2003**

with a water-soluble cationic organic material, wherein

said layer containing the porous filler and the binder is formed using a coating liquid having a pH of 4 or less;

the amount of the water-soluble cationic organic material contained in said layer containing the porous filler and the binder after the layer is impregnated with the water-soluble cationic organic material is 2% by weight or less in terms of solid ratio to the layer;

 said filler is contained in an amount of 40 to 80% by weight in the total solid of the ink receiving layer; and

said layer is impregnated with the water-soluble cationic organic material such that the water-soluble cationic organic material is contained in a larger amount in the vicinity of the surface of the ink receiving layer.

Claim 7. (original): An ink jet recording sheet according to Claim 6, wherein a silanol-modified polyvinyl alcohol is contained as the binder.

Claim 8. (original): An ink jet recording sheet according to Claim 6, wherein the water-soluble cationic organic material with which said layer is impregnated is a dicyandiamide condensate.

Claim 9. (original): An ink jet receiving sheet according to Claim 6, wherein the ink receiving layer contains a hydrate aluminum oxide.

U.S. Patent Application Serial No. 09/941,666
Amendment dated **September 8, 2003**
Reply to OA of **June 18, 2003**

Claim 10. (original): An ink jet recording sheet according to Claim 6, wherein the ink receiving layer contains a water-soluble aluminum salt.

Claim 11. (original): An ink jet recording sheet comprising an ink receiving layer provided on a substrate, said ink receiving layer being formed by preparing a layer containing a porous filler and a binder by coating and drying on the substrate and thereafter allowing the layer to be impregnated with a water-soluble cationic organic material, wherein

B1
said porous filler is silica, which is prepared by mixing silica having an average particle diameter of 5 μ m or less which is measured using a coulter counter method and an oil absorptiveness of 200 to 230 ml/100 g with silica having a larger average diameter than the former silica in a ratio by weight of 100:0 to 50:50; and

said filler is contained in an amount of 40 to 80% by weight in the total solid of the ink receiving layer.

Claim 12. (original): An ink jet recording sheet according to Claim 11, wherein the layer containing the porous filler and the binder is formed using a coating liquid having a pH of 4 or less and the amount of the water-soluble organic material contained in the layer containing the porous filler and the binder is 2% by weight or less in terms of solid ratio to the layer.

Claim 13. (original): An ink jet recording sheet according to Claim 11, wherein the amount of the water-soluble cationic organic material contained in the layer containing the porous filler and

U.S. Patent Application Serial No. 09/941,666
Amendment dated **September 8, 2003**
Reply to OA of **June 18, 2003**

the binder before the layer is impregnated with the water-soluble cationic organic material is 2% by weight or less in terms of solid ratio to the layer.

Claim 14. (original): An ink jet recording sheet according to Claim 11, wherein said layer is impregnated with the water-soluble cationic organic material such that the water-soluble cationic organic material is contained in a larger amount in the vicinity of the surface of the ink receiving layer.

B1

Claim 15. (original): An ink jet recording sheet according to Claim 14, wherein the amount of the water-soluble cationic organic material contained in the layer containing the porous filler and the binder before the layer is impregnated with the water-soluble cationic organic material is 2% by weight or less in terms of solid ratio to the layer.

Claim 16. (original): An ink jet recording sheet according to Claim 11, wherein a silanol-modified polyvinyl alcohol is contained as the binder.

Claim 17. (original): An ink jet recording sheet according to Claim 11, wherein the water-soluble cationic organic material with which said layer is impregnated is a dicyandiamide condensate.

18. (original): An ink jet recording sheet according to Claim 11, wherein the ink receiving layer contains a hydrate aluminum oxide.

19. (original): An ink jet recording sheet according to Claim 11, wherein the ink receiving layer contains a water-soluble aluminum salt.

B1
20. (previously presented): An ink jet recording sheet, comprising
a substrate;

a coating provided on the substrate, wherein the coating is formed by coating the substrate with a coating liquid containing a porous filler and a binder, the coating liquid having a pH of 4 or less, followed by drying the coating liquid; and

a water-soluble cationic organic material impregnated into the coating,

wherein the coating impregnated with the water-soluble cationic organic material forms an ink receiving layer, wherein the water-soluble cationic organic material is not present in the binder, wherein the water-soluble organic material is contained in the ink receiving layer in an amount of 2% by weight or less, in terms of solid ratio of the ink receiving layer; and wherein the filler is contained in an amount of 40 to 80% by weight, in terms of solid ratio of the ink receiving layer.